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R. O. COWLING, M. D., and L. P. YANDELL, M. D. EDITORS.

Translations.

APHORISMS ON CANCER.

BY PROF. FR. ESMARCH, OF KIEL.

Although the anatomist's knife and the quiet labor at the microscopist's table have revealed a great deal with regard to cancer, there are still so many problems to be answered that we may only hope for their solution in a well-systematized general work on this subject. To elucidate some of these points more I offer the following hints or aphorisms:

First let me remind you that, according to our clinical observations, the words cancer and malignant are no longer synonymous. The time has long passed since it was believed that a neoplasm was indisputably malignant as soon as the microscope revealed it to be cancerous in nature; while, on the contrary, if the anatomist pronounced it a sarcoma, there was nothing to be feared. We know now that many of the sarcomas are no less malignant than cancers; that in fact the very worst forms of malignant neoplasms must be classed with the large-celled sarcoma.

As to the word malignant, I must premise that every one knows the definition here attached to it. I would only call attention to the fact that there are tumors which, as a a rule, run a benign course, but sometimes take on a malignant character. We know this of enchondromas, fibromas, lipomas, and Cohnheim has found that even simple goitre may become malignant in character.

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Almost every surgeon with much practice has seen common warts of the face, which have for years remained unchanged, and which at a later age, on account of a slight abrasion, sometimes take on the form of ulcerating cancer.

Less rarely we meet with atheroma, suddenly giving rise to malignant trouble. Four such cases have come under my notice; the following is the most marked and interesting:

Woman of twenty-nine years. In 1858 the patient had a carcinomatous tumor, six centimeters in diameter, upon the back of her head, which for two years had developed itself from an atheromatous tumor. After the patient had scratched it with her comb, the elevated indurated edges, the numerous small yellow points, which were perceptible through the entire ulcerous surface, left no doubt as to the cancerous character of the growth. I extirpated the growth as far around as possible. I also removed the outer table of the skull over the whole bared surface. A short time afterwardnew, suspicious-looking granulations showing themselves-I applied chloride-of-zinc paste, which of course led to perforation of the skull. In a month after a new spongy growth had formed in this cranial cavity, and little by little brain-symptoms appeared, headache, photophobia, then some time after blindness, paralysis of the oculo-motorious, coma, etc. These changes came on by degrees, and the patient died several months after they first set in. A large abscess with softened walls was found under the dura mater. The microscope revealed that the cancer had developed from the sebaceous glands.

Psoriasis linguæ et buccalis, after lasting many years, often takes on cancerous formation.

Cicatrices, and in particular lupus cicatrices, very frequently become cancerous after a time. I know of numerous cases of this kind.

In the face of all this I must ask, How and under what circumstances do benign new formations and cicatrices take on a malignant character? What we know is comparatively very little. It is well known that certain irritation, in particular repeated irritation of the same tissue or of some tender part of the skin, can bring on carcinomatous growths. Neither can we doubt that carcinoma formations are induced by means of tobacco-juice, soot, paraffin, and similar products of dry distillation, by long-continued maltreatment of the cervix uteri, etc.

But in the great majority of cases no such history of preceding irritation can be proven, even through the most critical investigation. Thus the question is again involuntarily forced upon us, Do not constitutional anomalies or dyscrasies play some rôle here, and what? I am aware of the unsuitable application to which the word dyscrasia is so often put. You will understand me when I limit it to scrofulous and syphilitic dyscrasias.

From various observations I have been led to believe that inherited dyscrasias of this kind can develop a disposition toward malignant formations, and at the same time a recognition of this fact would give us a guide-mark toward the therapeusis.

The difficulty of finding such connection is, however, very great. We clinicians are, as a rule, little inclined to make perfect investigations, often because we lack time, but oftener because we lack patience. I have lately, however, gone to considerable trouble to find out the history of the parents and relatives of those cases of lupus and scrofulous cases affecting the bones which have come under my notice, and have found a history of tubercle in the greater majority of these cases.

All of us have seen cases where no sign of the former disease re-appeared after the timely removal of a carcinoma or sarcoma, But such cases are rare enough, either because the patients come to the surgeon too late, or because the surgeon himself postpones the operation too long; he tries first one means, then another, and so the favorable time passes. Even if it be too late, we are not justified in telling the patient, "Your case is incurable; go home and die." On the contrary, however, when there is no more hope of a cure, we are justified in making experimentations of all kinds, and in using the most powerful means in our hands to stay the disease.

With regard to treatment I think that arsenic, internally and locally, is the best remedy I have yet found for despairing cases. I believe it has had a good effect in several cases in which I used it. I use Fowler's solution internally and the arsenical paste as caustic. I also add to this treatment the dieting as proposed by Benecke. No meats, fish, eggs, cheese, beer, etc., must be allowed to be taken, and I find that the patients do well under this diet.

Another question I have asked myself—Do not such malignant growths as disappear under the influence of large doses of iodide of potassium have some connection with heriditary or acquired syphilis? Besides, there are many other reasons for believing such a connection possible. There are many products of tertiary syphilis which so closely resemble sarcomatous formations that they can not be distinguished from one another. Those forms of psoriasis linguæ et buccalis that take on a cancerous growth I have found usually to exist in syphilitic subjects.

If you search with care those cases of carcimona operated upon, there will be found numerous cases where skilled surgeons have extirpated gummata or tubercular ulcers of the tongue as cancers of the tongue, and syphilitic ulcers of the lip as epithelioma, and specific growths about the rectum as intestinal carcinoma, etc. Such mistakes are easily made, because it is by no means well

known that syphilitic gummata may make their first appearance many years after the infection, and without any secondary symptoms having shown themselves between times. I have seen several cases where I proved that the syphilitic poison had been latent in the body for more than forty years.

From all this I have made for myself the following rule: Never to extirpate an abnormal new formation until I have convinced myself through the microscope of its nature. A small piece of the surface or from the depths of the growth suffices, and we may easily do this in all cases where a graver operation is intended to be performed.

There are other cases of growths of benign character which may easily lead us into error, such as *sycosis parasitaria*, where the skin is covered with a stinking, easily broken down fungosity, which at first glance resembles carcinoma very greatly.

I therefore repeat, gentlemen, No extirpation of abnormal new formations without prior diagnosis by means of the microscope.

L. S. OPPENHEIMER, M. D.,

Microscopist to the Louisville City Hospital, and Visiting Surgeon to the same institution.

Correspondence.

TWO CASES OF ASTHMA TREATED WITH SANTONINE AND CALOMEL.

To the Editors of the Louisville Medical News:

Case I.—In the winter of 1876 I was called to see a girl about eight years of age. She was suffering with an attack of asthma. It was thought she could not live more than a few hours. From her general appearance, and the history of an older sister, who died about two years before similarly affected, and after she died a worm came out of her mouth, I diagnosed this case one of worms. I gave her santonine, four grains, calomel, two grains, and left two doses of santonine, four grains each, to be given every six hours. The next day her father reported her convalescing, she having passed over one hundred worms. She has had several similar spells

since, and received the same treatment with similar results.

CASE II .- Mrs. C., aged about thirty-five years. Last September I was called to see her, and found her suffering with a spell of asthma. She said that she was subject to it. She had taken two or three doses of tincture lobelia before I arrived. She vomited soon after I entered the room, and threw up a large worm, after which she seemed very comfortable. I gave her six grains each of santonine and calomel, and left two doses of santonine, six grains each, to be given every six hours. I heard nothing more from her until the first day of this month. I met her husband, who told me she has had better health since I gave that medicine than she has had for ten years. She passed fifteen or twenty worms.

Query: Did the presence of the worms cause the asthma, and their expulsion give relief?

[AMES D. EWING.]

LITCHFIELD, KY.

Books and Pamphlets.

A REVIEW OF THE PAST AND PRESENT TREAT-MENT OF DISEASE IN THE HIP, KNEE, AND ANKLE JOINTS, WITH THEIR DEFORMITIES. By Hugh Owen Thomas. Liverpool: T. Dobb & Co., Printers, No. 69 Gill Street. 1878.

A valuable addition to the literature of the subjects treated of, and of interest to all surgeons.

REMARKS ON SOCIAL CONSERVATISM. By J. W. Singleton, M. D., Paducah, Ky. Read before the Tri-State Medical Society of Illinois, Indiana, and Kentucky, at Evansville, Ind., Oct. 17, 1877. From the May number of the Richmond and Louisville Medical Journal.

A delightful essay, full of beautiful sentiments, clothed in poetic language, and thoroughly Singletonian.

I am told on good authority that Dr. Tilbury Fox will succeed Mr. Erasmus Wilson as Professor of Dermatology at the Royal College of Surgeons.—Lond. Med. Exam.

Miscellany.

THE CURE OF HABITUAL DRUNKENNESS.-London Lancet: The Habitual Drunkards Bill is likely to become law, and it will be necessary to educate the magistracy up to the point of being able to use it wisely. We can not abate one tittle of our stronglyexpressed objection to the multiplication of private houses of restraint for persons who are held to be incapable of exercising selfcontrol. The only safe principle on which to legislate we conceive to be that the state should reserve to itself exclusively the right and power of imprisoning. It does not practically affect the question at issue whether the incarceration be voluntary or imposed. The fact that restraint is to be exercised presupposes resistance, and the subject should not be asked or obliged to surrender his personal right to any authority which is not public and officially responsible. This principle applies with primary force to the case of lunatics, and it is equally if not even more important in relation to the imprisonment of habitual drunkards. Dr. Bucknill, in a letter to the Times, adheres to his expressed judgment on the working of inebriate asylums in the United States, which, upon the whole, he has pronounced to be a practical failure. The reports which have reached us certainly support that conclusion. Meanwhile we do not altogether understand one objection urged by Dr. Bucknill to the proposed measure-namely, that it will deal diversely with the rich and the poor. As we understand the scheme before Parliament, there will be provision for the habitual drunkards of all classes. The main objection we see to the general proposal is the opening it it will offer for cruel abuses and "misadventures." Nothing is easier than to foster a habit of excess in drink; and if the proof of such a habit is to be the sole passport to an asylum, the facility offered for disposing of inconvenient or obstructive persons must be apparent. The huge peril to society this facility will create will be augmented by the

fact that the restraint to be applied will be in the hands of interested persons, who will derive a profit from the retention of patients under their care and confined within their establishments. Asylums for inebriates should be directly under state control and the most rigorous supervision. This protection should be incorporated in the measure to render it safe and practical.

ABSTRACT OF SANITARY REPORTS RECEIVED DURING THE PAST WEEK UNDER THE NATIONAL QUARANTINE ACT:

OFFICE SURGEON-GENERAL, U. S. M. H. S., WASHINGTON, August 3, 1878.

New Orleans. Since report last week one hundred and fifty-eight cases yellow fever and thirty-six deaths have occurred, making in all one hundred and ninety-five cases and fifty-three deaths to yesterday evening. There are now four principal points of infection, and these spreading; but the board of health hopes to control it.

One passenger, landed Monday at Vicksburg, has since died of *yellow fever*; on Tuesday one case taken from hotel to hospital at Cincinnati with same disease; both from New Orleans *en route* for North.

Key West. No new cases of yellow fever for four days to yesterday noon; no cases in port; two at marine hospital convalescent.

Quarantine stations. Many vessels arriving at quarantine stations on the Atlantic from Cuba bring cases of yellow fever—a common yearly experience.

Havana. One hundred and twenty-nine deaths from yellow fever and thirteen from small-pox for week ended July 20th.

Matanzas. No abatement of yellow fever or ratio of deaths since week ended 26th July.

Calcutta. Fourteen deaths from cholera during week ended June 1st.

Bombay. Thirty-three deaths from cholera during two weeks ended June 11th.

Constantinople. Bulk of the Russian army, encamped upon unhealthy lowlands, has removed to healthier camping grounds, and

most of the refugees in city have gone to Asia Minor and Syria, about eighty thousand remaining; since which the small-pox, typhus, measles, scarlet and enteric fevers, which prevailed so extensively near close of the war and since cessation of hostilities, have greatly diminished (July 12th).

The epizoôtic prevails extensively among the cattle of Asiatic and European Turkey. Reports received from other places indi-

cate good health. JOHN M. WOODWORTH,

Surgeon-general U. S. Marine Hospital Service.

"GIVING UP" AND "LEAVING OFF."-London Lancet: The number of Punch for June 15th satirizes in an amusing sketch the mania of the movement for "giving up" and "leaving off" every thing-except some cherished object of delight. The crowning conclusion of a club colloquy on the fashionable self-denial is an intimation from one of the party that he has "a good mind to go in for that sort of thing, and give up every thing but skittles." There is truth in the travesty. A wild enthusiasm seems to have been stirred by the denunciations of orators and scientists, and the discovery of unsuspected perils lurking in most of the habits and customs of life. It is becoming a serious enterprise to live, and "living to eat" has been changed back to the form of "eating to live" without regaining its innocence. What to eat and drink and wear, or rather what to avoid eating, drinking, and wearing has become a question so engrossing that life is beginning to be a weariness, and the preservation of health a worrying toil. The policy of multiplying precautions until the enjoyment, the very purpose and tolerance of life, are destroyed by the cares of its maintainance, is not likely to advance the interests of public prudence. We must confess to a feeling of sympathy with the thought that inspired this not inopportune caricature in the leading satirist, and we venture to hope it may have its weight with those who are laying on the instinct of self-preservation a heavier burden than it probably can bear.

MORTALITY AMONG MILITARY SURGEONS DURING THE TURKISH WAR.-London Med. Times and Gazette: The excessive rate of mortality among military surgeons during the war with Turkey, compared with that in the combatant portion of the army, has led to an inquiry if such was singular to the late war; and a Russian medical journal, in an article on the subject, compares the ascertained losses of surgeons in former wars with the late war with the following result: During the campaign in 1813-15 there were 2,170 surgeons in the Prussian army, of whom about ten per cent were either killed or wounded, being in about equal proportion to the casualties among the combatants. In the French campaign against Constantine in 1837, while every thirteenth combatant officer was killed, every sixth surgeon died. This, in proportion to the numbers, shows that the mortality among the surgeons (16.66 per cent) was more than double that of the officers (7.7 per cent). During the Crimean war the mortality among the surgeons was, according to French official statistics, 18.2 per cent, and among the combatant officers 7.3 per cent. In the late Russian campaign 355 surgeons, out of a total of 2,839, have died, being equal to about 12.5 per cent. In the Mexican expedition the rate of mortality among the surgeons was about twenty per cent, while that of the combatant officers was only about four per cent. The Prussian army, during the Franco-Prussian war in 1870-71, is the single instance recorded where the proportion of deaths among the combatant officers was larger than that of the surgeons.

DR. D. W. YANDELL has arrived in New York, and is expected in Louisville to-day. He returns fully restored in health after his pleasant sojourn abroad. A warm welcome awaits him.

THE "drowning" season, so the London Lancet denominates the bathing season, because of the numerous accidents of this kind.

HIGH TEMPERATURE AND MORTALITY .-London Lancet: The annual rate of mortality among the more than seven millions of persons estimated to be living in the twenty large English towns dealt with by the Registrar-General in his weekly return, which had averaged 20.8 per 1,000 in the seven weeks ending June 22d, and had only ranged from 19.6 to 21.3, rose last week, under the influence of the sudden rise of temperature, to 23.8 per 1,000. Thus the mortality last week in those twenty towns exceeded by about a seventh, or nearly fifteen per cent, the average rate in the preceding seven weeks. As might be expected, the effect of the heat was most marked upon the mortality of infants and of elderly persons. The increase last week of the deaths of infants under one year of age, upon the average number in the seven preceeding weeks, was equal to twenty-one per cent, and the increase of deaths of persons aged upwards of sixty years to twenty-six per cent, while among children and adults aged between one and sixty years it did not exceed nine per cent. Although the heat was greater in London than in most of the other large English towns, the increase of mortality was not proportionately so great in London as in the nineteen towns. The most marked influence of the high temperature upon the mortality returns of the week was shown in the fatality of diarrhea. deaths referred to diarrhea in the twenty towns, which in the seven preceding weeks had ranged between forty and fifty-six, rose last week to one hundred and thirty-three, of which seventy-two occurred in London and sixty-one in the nineteen provincial towns. The annual death-rate from this disease was equal to 1.1 per 1,000 in London, and did not exceed o.g in the other towns. Although the fatality of diarrhea showed so general an increase in the large towns, it was considerably below the average fatality for the last week of June. Leicester, which has in recent years become notorious for its summer death-rate from infantile diarrhea, has already taken the lead

in this direction. The annual death-rate from diarrhea in this borough was equal to 2.6 per 1,000 during last week, or nearly three times as high as the average rate from this cause in the nineteen large provincial towns.

DEVELOPMENT OF THE CRANIUM IN DOCTORS.—Lyon Médical: In a paper by MM. Cliquet and Lacassagne, read at the Société de Médecine Publique, they state the results of some measurements which they have made at the Val-de-Grâce by the aid of the conformateur. They were made on the heads of 190 military doctors, 133 soldiers able to read and write, 90 soldiers unable to do so, and 91 prisoners. The following are the means of the figures in centimeters:

*	Doctors.		Illiterate Soldiers.	Prisoners
Longitudinal diameter,	85.29	81.97	79.13	81.10
Anterior	48.91	43.65	42.35	41.12
Posterior	52.58	49.66	50.27	49.90

The difference in favor of the doctors over the illiterate were 4.50 in the longitudinal diameter, 6.37 in the anterior, and 2.82 in the posterior. The development of the frontal region was 6.37 more considerable in the doctors than in the illiterate. The asymmetry of the two halves of the cranium, which was constant, differed. In the literates the left part of the frontal region was most developed, while in the illiterates it was the right part of the occipital that was so. The occipital region was always most relatively developed in the ignorant.

A CURIOUS CASE.—Lond. Lancet: A little girl at Brighton has been killed by accidentally swallowing a squeaking air-bladder. It appears, from information kindly furnished us by Mr. G. A. Johnson, that the toy slipped through the glottis with the bladder downward, and the quill mouthpiece upward, so that with every inspiration the bladder became more or less inflated, and thus prevented the entrance of air to the lungs, and produced death by suffocation. A verdict of "accidentally suffocated" was returned by the jury. The case must be unique.

INSTRUCTION IN COOKERY.—An important discussion on this subject took place at the last meeting of the School Board for London. It was proposed to have a properly qualified teacher of cookery, and that the salary should be £100 a year. Objections to the proposal were made by Mr. Potter and Mr. Lucraft, the former stating that the requirements of cookery in an artisan's home were very small, and were confined to making soup, cooking a bit of fish or a mutton chop; except on Sunday, when, perhaps, a joint would have to be roasted. We are far more inclined to agree with the Rev. G. Murphy, who "believed that the last speaker might have some knowledge of working people out-of-doors, but not of them indoors. The art of cookery was to make a little food go as far as it could, and as relishable as it could be made. It was a difficult art, and could not be done by rule of thumb. He might add that Mr. Potter had argued as if every daughter had a mother, and every mother was at home." We may even go further, and state that in many cases drunkenness is the result of a want of properly cooked food. The desire for food is present, but when the food is placed on the table it would require at least three or four days' preparatory starvation to tempt any one to partake of it; on the other hand, the dramshop is easily accessible, and the cravings of the appetite are there soon removed. There is here some excuse for the drunken habits of the so-called "working classes." A mutton chop is simple enough in itself, but there are a great many ways of cooking it, and even variety in the preparation of a mutton chop for the table is not without its charm.

HYDROPHOBIA.—London Medical Times and Gazette: From an official return it is shown that during the year 1876 the number of reported deaths from hydrophobia was fifty-three; in 1875 it was forty-seven; in 1874, sixty-one; in 1873, twenty-eight; in 1872, thirty-nine; in 1871, fifty-six; in 1870, thirty-two; in 1869, eighteen; in 1868, seven; in 1867, ten; and in 1866, thirty-six.

"DOURINE" OF THE HORSE. - London Lancet: St. Cyr, of the Veterinary School of Lyons, calls attention to a venereal affection of the horse of which too little notice has hitherto been taken by human pathologists. It is termed "Dourine" in France, and "Beschälkrankheit" in Germany. It was first described by von Ammon at Posen in 1796, and has since been frequently observed; and recently, as in 1850, a paper has been written upon it by Maresch and Röll, and in 1867 another by Pillwax and Maresch. The disease consists in swelling, ædema, heat, pain, itching, congestion, and increase of secretion of the mucous membrane of the vagina. Sometimes, also, a plaque-like, exanthematous eruption occurs, with dysuria, in the mare; and in the stallion the symptoms are-swelling, heat, pain, œdema, and flaccidity of the penis, with slight urethritis and dysuria, though the two latter symptoms are less constant than in the mare. A polymorphous exanthem sometimes appears on the penis and scrotum. The animals get thin and pass into the second stage of the disease. While the local symptoms diminish, the impairment of nutrition becomes more marked; the muscles, more especially those of the posterior extremity of the body, attenuate and tremble: the animal limps; the joints swell, and paresis or paraplegia of the lower extremity occurs. Sometimes rounded tumors (? œdema) show themselves at various points beneath the skin, not painful, and disappearing in a week or a fortnight. In the third stage abscesses form, with sores, ozæna, and enlargement of the glands. The disorders of nutrition progress, and the animal dies from exhaustion or from hypostatic pneumonia. The disease may either be acute or may last for two years.

In the paragraph of last week's journal referring to the fate of a wife-murderer we are made to say "gay partner," when it should have been "joy-partner." It is seldom that a mistake of the printer has caused us such annoyance.

ENGLISH DRINKING.—Medical Times and Gazette: The Bishop of Manchester, in consecrating a new church at Bradford-cum-Beswick, expressed himself very strongly on the present vice of drinking. He remarked that when the amount of money spent on intoxicating drinks was considered, one somehow or other thought that we hardly deserved prosperity if money was so lavishly spent upon such unworthy objects. The times were not bad for the publichouses, for he could see them growing up in greater and greater splendor at every corner of the streets, and he really did not know what was to become of the country if these terrible drinking habits of the people were to continue; he was afraid the curse was spreading like a leprosy every where, Therefore, when we said that we hoped that God would give back to England her days of prosperity, he was not quite sure that days of prosperity ever would come back, or ever ought to come back, to England until England had once more become a sober and industrial land.

Boxes on the Ear. - London Lancet: The blindness of the late King of Hanover was occasioned, it is understood, by an accidental, and by no means violent, blow upon the eye. Scarcely a day passes, we believe, without some schoolmaster (or schoolfellow, in natural imitation of his master) giving a lad a smart "box" upon the ear. Few persons would be bold enough to choose the eye as a part upon which it was expedient to inflict a violent blow by way of moral education, but there is apparently no end to the numbers who select an organ upon which violence is liable to be attended with much more dangerous results. For not only is deafness caused by "boxes," which rupture (as they continually do) the drum of the ear, but the inflammation of the internal cavity, which is so frequent a result, may be followed, years afterward perhaps, by disease of the bone, giving rise to abscess of the brain, and having a fatal termination. Medical men alone can be fully aware how

fruitful a source of suffering and danger is represented by the box upon the ear. We are informed, for example, of two cases, under observation at the present moment, in which schoolboys have been the victims of such an assault. Surely schoolmasters ought to have learned, long ere this, the danger of the mode of personal chastisement that has apparently usurped the place of others which, if more disgusting, were not attended with an equal amount of peril.

ANTIQUITY OF VACCINATION. - London Med. Examiner: According to the proverb, there is nothing new under the sun. Hence, perhaps, Dr. Huillet, late of Pondicherry, undertakes to show that vaccination was known to a certain Dahnwantori, who flourished several thousand years before Hippocrates. Dr. Huillet appears to have arrived at this conclusion from the contents of certain Hindoo manuscripts preserved at Pondicherry, in which are described the effects produced by inoculating the human subject with the matter taken from a man or a cow. The secondary disease is described as identical in appearance with its source, with this important difference, it is quite harmless.

OPENINGS IN AFRICA.—London Lancet: We are credibly informed that good openings exist at Uitenhage, Mossel Bay, Adelaide, Middleburg, Hope Town, Bridge Town, and Aliwal North, in the colony; Kimberley, in Griqualand West; Potchestroom, Heidelberg, New Scotland, and Wakkerstroom, in the Transvaal; Newcastle and Maryburgh, in Natal; and Kronstadt, Reddersburg, Philippolis, and Bloemfontein, in the Free State. Here is a chance for patientless physicians.

AMERICAN DERMATOLOGICAL ASSOCIATION. The next annual meeting of the American Dermatological Association will be held at the Grand Union Hotel, Saratoga Springs, N.Y., on the 27th, 28th, and 29th of August. Many important papers will be read. Regular practitioners are cordially invited.

R. W. TAYLOR, M. D., Sec'y.

DANGERS OF SALICYLIC ACID. - Lancet: An explanation of the ill effects induced occasionally by salicylic acid probably lies in the difference between the natural acid and the product produced artificially. It is a fair assumption that the latter is not always devoid of carbolic acid, which would account for many of the distressing gastric and head symptoms that have been observed in patients who had been taking the drug for some time. A Note on Salicylic Acid, read by Mr. J. Williams, F.C.S., at a recent meeting of the Pharmaceutical Society, and published in the journal of the society, is worthy the attention of the profession. Mr. Williams's experiments have convinced him that the artificial acid as supplied in commerce is really made up of two bodies having very different properties.

DR. WM. V. EZELL, of Carrollton, Ala., sends this recipe, with the statement that it is so palatable that the patient does not recognize the nature of the medicine unless told what it is:

R	Oleum ricini	
	Tr. cardamom co	3 iv;
	Ol. gaultheriæ	
	Pulv. acaciæ	
	Pulv. acaciæ	åå 3 11;
	Aq. cinnamomi	
	M. Sec. art.	

ASPHALTE PAVING .- London Lancet, June 15: There can no longer be a question that the practice of paving thoroughfares with asphalte should be discontinued in the interests of humanity, supposing we care nothing for the peril of accidents to limb and life. A slight shower renders the surface of a roadway paved with this material so slippery that no horse can be trusted to keep his footing, or, if he escapes a fall, is not likely to do so without a severe strain to the muscles of the shoulder or back. Wood is incomparably better, but, even in respect to the mode of laying this material, there is room for improvement. The avoidance of noise and needless dust points to the use of wood, and experience justifies the choice.

Selections.

Note on the Action of Quinine.—W. H. T. Power, B. A., M. R. C. S., L. R. C. P., in London Lancet:

The extreme importance of ascertaining the precise action of *one* drug on any morbid state induces me to publish the following remarks:

I. Having had large experience of the action of quinia in malarious disease, I have for some seven years pondered over the matter, not being satisfied with the explanation of its modus operandi as given in the ordinary text-books. In the story of the epidemic in Mauritius of 1866-67, written by (then) Surgeon-major J. Small and myself, we pointed out that the relapses of the fever, during our first winter at home and subsequently, invariably occurred after a sudden fall of the atmospheric temperature (the "wet and dry bulb" and "maximum" and "minimum" thermometers being read twice daily); a fall not necessarily to freezing-point, but such a fall as even in summer would produce a sense of being chilly.

2. Dr. E. L. Fox, in the Lancet of July 29, 1876, gave a case of sunstroke in which, after the subcutaneous injection of quinia, the patient recovered. I ventured to suggest to him its mode of action, which he added to a note of his in the Lancet of September 28, 1876. And in the ordinary treatment of sunstroke the cold douche is used, which would act on the nerves of the cutaneous blood-vessels, which I also below give as the action of quinia.

3. I believe the post-mortem signs of death from sunstroke are the same as those from malarial fever—viz., congestion of the venous system, and the blood of the body may be said to be found in the pulpy spleen and in the smaller veins.

4. Malarial poison, as is well known, may take some time before showing its existence in the body. This is well shown in the case of a sergeant, who remained in the center of the malarial district for some months after the regiment left Mauritius, and had his first attack of ague (much to his disgust) while rounding the Cape of Good Hope, when, he told me, the weather became suddenly very chilly. He was a very intelligent, well-educated man, and besides brought with him a medical certificate from a surgeon-major, who was a passenger on board the same vessel. (Such a case furnishes a warning as to certain hill sanataria being malarious, the real fact being the colder temperature may bring out the fever signs, the disease having been really acquired, though not shown, either by residence in or by merely passing through a malarious district.)

5. In the Practitioner (vol. from July to December, 1872) is a summary of a paper by Dr. C. Boisz, where

it is stated quinia acts on the vaso-motor nerves and spleen in health.

- 6. Quinia acts apparently, as a drug, just as the heat of the fire does when the burnt finger is put close to it (the old-fashioned remedy for a small burn, to stop the pain), and as Skey's plan of painting a strong solution of nitrate of silver over a burnt surface to relieve pain. I believe I am right that in both of these cases the palsy of the vaso-motor nerves is overcome, the circulation restored, and the pressure of the stagnant blood in the swollen veins on the nerves removed.
- 7. That any agent, such as heat, causing such palsy might possibly be overcome by using large doses of quinia (in the case of heat I do not know how large). I refer to those numerous cases of death in all classes which often occur from the terrible heat in the Red Sea; persons already with a weakened action of these nerves from malaria are exposed to a fresh cause of venous blood congestion—viz., atmospheric heat—and suffer accordingly.
- 8. Of course it would not follow that after the palsied nerves had lost almost all control over their organs, quinia would have this action, nor in the case of the enlarged spleen, liver, etc., where hypertrophy of their framework has occurred.
- 9. As a general point, I may refer to the fact that it is most dangerous in the early morning, when it is is coldest, and when (as I found in Mauritius) the bodily temperature in health is lowest in the twenty-four hours; and again, this action of cold coincides with the effect produced by sudden cold in causing relapses of ague in temperate climates in those who have been exposed abroad in hot climates to the influence of malaria.
- 10. Supposing this to be a correct explanation of the action of quinia, might it not be a fair deductive guess that in sufficiently large doses it would be of use in all cases of fevers, etc. of any description where the tendency to death is by congestion of the right side of the heart, the lungs, or the general venous circulation, especially in the smaller vessels.
- 11. Of course, if the disease were so far advanced that the stomach was, to all intents and purposes, a lifeless bag, as in the stage of collapse in cholera, quinia would be useless, unless indeed it might be taken into the system by subcutaneous injection. The action of the cold douche in sunstroke would be on the nerves of the cutaneous circulation, this being an external agent, while quinia would have the same effect as an internal agent.

The worst cases of malarial poisoning I have seen occurred at night, at which time heatstroke is also very fatal. Cases which I have ventured to call "malarial collapse"—i. e., cases in which men have had either mild attacks of ague or no attacks at all, and have been free from fever for some days, go to

bed sensible, and a few hours after are found to be apparently asleep, but really not conscious. In these cases (after I had lost one patient, to my astonishment and disgust) I used to administer a twenty-grain dose of quinia, and repeated it again in an hour if the pulse got slower, and I lost no more such cases.

I am aware how incomplete this paper is, but 1 am desirous of bringing the subject forward, since in the last volume of "Materia Medica" that I have seen quinia is called an "antiperiodic," which, in the first place, does not tell us any thing of its action, and in the second place it acts just as well in cases where there are no "periods," and in these cases, where the malarial poison acts more like a lightning-stroke, giving the system, as it were, no power to establish a reaction—i.e. to develop a stage of preternatural heat—cases I have called malarial collapse.

I can only venture to hope that whatever mistakes of reasoning may occur in this paper, these very errors may lead some one more capable to define the real action of this drug, an action so utterly unlike any other, that only those who have seen cold collapsed human beings almost snatched from death's very door by one large dose of it are able to appreciate it.

Butter Substitutes .- London Med. Examiner: In forming an opinion as to the desirability of introducing artificial butter, or butter substitutes, the first point to be settled is whether or not real butter has any intrinsic advantages over the fats which might be substituted for it; and accordingly the question arises whether, in the first place, the butyrate of glycerine, and the other glycerides of fatty acids soluble in water, are capable of being assimilated in the same manner as oleine and stearine are assimilated. There is, unfortunately, no evidence before us, and we can not say whether, when animals are fed with fat containing butyrine, the fat which is deposited in their tissues becomes charged with butyrine; it would therefore be interesting to examine the fat of veal, and likewise that of pigs, fed largely upon milk. Possibly such fat would be found to contain butyrine, and possibly some of the discrepancies in the results published by different analysts may be due to something of that kind. As we have said, this point requires investigation; and, on the other hand, it is quite possible that butyrine may be incapable of direct assimilation, and that butter-fat compared with an equal fat of common fat, may be less valuable as tissue-producing material. But, however that question may be answered, we think we may at any rate assert that a given weight of butter can not be better tissue-producing material than an equal weight of the common fat, and the advantages of butter (if it have any) must be that it is more agreeable to the taste and more digestible. The fat of cocoa-that is to say, the fat which makes chocolate so rich-is said to be nearly pure stearine, and is not suspected of containing any appreciable quantity of butyrine; and cocoa fat is both palatable and digestible. Salad oil (which certainly yields no appreciable quantity of butyrine) is by many people found to be palatable and digestible, and, bearing this in mind, it does not appear to us to be at all unreasonable to expect that an efficient butter substitute might be attainable. In Holland and in France we are informed that artificial butter is manufactured on a considerable scale, and the product has made its appearance in this country, under the name of butterine and margarine. Sometimes it has been passed off as real ewes' butter. We need hardly say that the surreptitious introduction of the substitute does not meet with our approbation, and that what we have in contemplation is the open and avowed substitution of other fat in place of butter. Should the manufacture thrive, a favorable influence would be exerted on the milk trade; and under such circumstances we might hope that whole unskimmed milk (and not skim or half skim's would become the usual condition of the milksupply.

Treatment of Diphtheria by the French School. - London Med. Examiner: Diphtheria is very prevalent just now in the French capital, and naturally occupies the attention of the most eminent practitioners in Paris, Hitherto the method by "substitution," or the conversion of the specific into simple inflammation, has been the one usually employed, particularly by Bretonneau and his illustrious successor, Trousseau. The latter, however, was fully acquainted with the specific nature of the diphtheria poison, yet continued the practice which experience had shown to be utterly futile. It has been remarked, on the other hand, that the failure of local remedies depends on the circumstances that those employed are not addressed to the specific elements of the disease. M. Revillent's experience leads him to conclude that we possess such a remedy in lemon juice, when applied to the false membranes, and also administered internally in large doses. It would truly seem to be a specific, as the author assures us that he has not lost a single case in which this method had been fully and fairly carried out.

Sore Nipples.—Revue Méd.: Dr. Brochard, so well known by his efforts in favor of maternal suckling, observes that sore nipples are often due to the habit which many young mothers have of applying mallow lotions to them, which only render the mucous membrane unnaturally tender. These young mothers also frequently induce sore nipples by the practice of applying the child to the breast every few minutes. On the other hand, the same effect is pro-

duced by following the advice of many nurses to defer commencing suckling to the second or third day. The breast then has become hard and swollen. and the infant can not draw milk by sucking. However, from whatever cause sore nipples may arise. Dr. Brochard strongly advises abstinence from employment of any of the numerous remedies (especially those of a greasy character) which are being constantly recommended as infallible, and as constantly falling into disuse. Instead of these he recommends. however deep or extended the chaps may be, the following simple procedure: Wash the nipple in pure water and carefully dry it, and then powder it and the sores well with suberine - i. e. the impalpable powder of cork. This, too, is much to be preferred in the hygiene of infancy to the inert powder lycopodium, for it is cheaper and contains some tannin. Over the suberine is to be placed a portion of goldbeater's skin cut star-fashion, in the center of which some apertures have been made by means of a very fine needle. Whenever the infant is about to suckle, the suberine is to be washed off and the gold-beater's skin re-applied, by means of which the child will suck without causing any pain. When it has finished, the suberine and the gold-beater's skin are to be replaced, and so on every time. This simple treatment always succeeds.

The Secretion of Bile.-London Medical Examiner: We shall do best service on the present occasion by presenting to our readers the results of some of Dr. Rutherford's recent researches, communicated by him at a recent meeting to the Medico-Chirurgical Society of Edinburgh, a report of which appears in another column. The experiments were carried out in a similar manner to the former series; the essential conditions of the experiments, we may remark, being, that the animal is fasting, thus avoiding the fallacies underlying the Hughes Bennett inquiries; that the secretion shall not be rendered irregular by the movement of the animal, which is avoided by curarization and the employment of artificial respiration regulated by a small steam-engine; that all fallacies regarding spasm of the gall-bladder and ducts should be avoided by emptying the gallbladder and securing the cystic duct with a clamp previous to the experiments. The bile was made to flow into a fine centimeter measure, where its quantity was recorded every quarter of an hour; and thus the quantity and rapidity of secretion were easily registered in the graphic method, which served so much to assist the reader in the former experiments.

Physostigma, Prof. Rutherford finds, raises the secretion of bile, but the quantity required to do so is so large as to render it certain that this drug could never be used as a cholagogue. It is interesting to notice that atropine may completely antagonize the action of physostigma on the liver. Jaborandi is shown to have a slight cholagogue effect. Menispermin, a resin derived from the yellow parilla, said to have tonic and aperient properties, is shown by Prof. Rutherford not to be a cholagogue. Baptisin and phytolaccin, two American eclectic remedies, possess decided stimulant effects on the liver, especially the former. Benzoic acid, from its insolubility, has only slight influence, but such as it has, is to increase the secretion of bile. The alkaline salts of benzoic acid, on the other hand, have a very marked influence in augmenting the biliary secretion. Thus benzoate of sodium and benzoate of ammonium are both powerful hepatic stimulants and cholagogues. To these properties, no doubt, these salts owe their undoubted influence over the lithæmic nervous symptoms, the result of functional derangements of the liver. Incidentally Prof. Rutherford remarks that the sodium salts are more powerful, as a rule, than the corresponding salts of potassium and ammonium, and he ascribes this to sodium being a natural constituent of the bile. Among its many valuable properties, we are told that salicylate of soda is a cholagogue, certain, rapid, and powerful in its action. Ammonium phosphate is a powerful cholagogue without influencing the intestinal glands. Tannin has no notable effects on the biliary secretion.

Morphia, it is interesting to learn, contrary to the widely diffused belief, has no effect on the liver, and does not interfere with the action of cholagogues. Iodide of potassium has no effect on the liver. Hyoscyamus and acetate of lead are the only two substances which have been found to lower the secretion of bile without purgation. The former, in usual doses of the extract, has no appreciable influence, and may therefore be usefully employed as a vehicle for some of the alkaloids. Prof. Rutherford reiterates all that he has said previously about the action of mercurials on the secretion of bile in the liver of the fasting dog. He has shown that so far from increasing the secretion of bile there is a fall in the secretion when calomel is administered. Corrosive sublimate, on the other hand, is an hepatic stimulant. His experiments refute Mialhe's theory that the cholagogue effects of calomel are due to its conversion into corrosive sublimate in the stomach. In reviewing his series of experiments Prof. Rutherford remarked that they were concerned with the secretion of bile and not its expulsion, though incidentally some of his experiments show that the increased secretion was not due to irritation of the ends of the bile ducts. The clinician and the therapeutist have to thank the physiologist for this valuable increment to their knowledge. These experiments will form the ground-work, it is to be hoped, for a philosophical research into the action of remedies of a welldefined class on the human system.

Carbolic Acid.—Andrew Dunlop, M. D., in London Lancet, 13th July:

It seems to me that the usefulness of carbolic acid as an internal remedy is not so widely known and appreciated as it ought to be. I first began to use it about thirteen years ago, to check the vomiting that so frequently accompanies the cough in phthisis, and subsequent experience has only served to confirm my first opinion of its value in many cases of the kind. I am now in the habit of prescribing it in the following affections, often with marked benefit:

- In vomiting, especially the vomiting of alcoholic gastric catarrh, or in ordinary acute and sometimes chronic, gastric, and gastro-duodenal catarrh.
- 2. In hooping-cough, where vomiting is a prominent and distressing symptom.
- In the vomiting with cough in phthisis, as already mentioned.
 - 4. In many cases of diarrhea.
- 5. In dysentery and dysenteric affections. I find it useful in that peculiar dysenteric affection of delicate young women, where shreds of lymph are passed with the feces, and where there is often a good deal of abdominal pain and tenderness. It is also of value in the dysenteric diarrhea of phthisis, where scanty mucous stools are passed, usually a troublesome complication.

I was lately told by a dentist that he occasionally gave it to counteract the tendency to retching caused in some patients by taking a cast of the mouth, and other dental manipulations.

I generally prescribe carbolic acid in one- to twograin doses, with a little glycerine to aid its solution (though this is not usually necessary), and some tincture of cardamoms or peppermint-water to cover its taste and smell.

Ammonia an Aid to Chloroform Inhalation.

—London Medical Examiner: Prof. Occhini, after some preliminary experiments, has concluded that the inconvenience and danger attending the administration of chloroform to patients suffering from heart disease may be guarded against by the employment of ammoniacal inhalations immediately previous to the administration of the anæsthetic. He considers that the stimulant action of the ammonia counteracts the depressing influence of the chloroform.

Treatment of Ptyalism.—Ibid.: Dr. Styrap, of Salop, considers that sulphur is a specific for ptyalism. He recommends the following prescription:

R	Sulph. præcip	gr. ij-iv;
	Potas. chlora	gr. xxx-lx;
	Liq. morph	3 j-3 jss;
	Mis. amygdalæ, ad	3 viij.

Dose-Two tablespoonfuls two or three times a day.